

M. COM DEGREE END SEMESTER EXAMINATION : MARCH 2023**SEMESTER 4 : COMMERCE****COURSE : 21P4COMT16EL : ADVANCED COST ACCOUNTING***(For Regular - 2021 Admission)*

Duration : Three Hours

Max. Weights: 30

PART A**Answer any 8 questions****Weight: 1**

1. What is Material Mix Variance? (U)
2. What is a P.V. Graph? (U)
3. Explain briefly the objectives of Target Costing. (E)
4. What is Kaizen Costing? (U)
5. What is Ideal standard? (U)
6. What is activity-based budgeting? (R)
7. Explain in brief the marginal cost method of transfer pricing. (R)
8. From the following figures, you are required to calculate a) P/V Ratio, b) Break-even sales volume, c) Margin of safety and d) Profit. (A)
Sales Rs.4,000; Variable cost Rs.2000; Fixed cost Rs.1,600.
9. State the benefits of product life cycle costing. (Cr)
10. What is customer cost analysis? (U)

(1 x 8 = 8)**PART B****Answer any 6 questions****Weights: 2**

11. Shakshi Ltd. manufactures two products X and Y. Product X is produced in four runs of 250 units and product Y in five independent runs of 200 units. Each product consumes equal direct material and direct labour content. The product overheads amount to Rs. 36,000 which comprises line set up cost Rs. 18,000, Product inspection cost Rs. 9,000 and Rs. 9,000 for material movement to the product line. Total cost incurred for producing 1,000 units of Product X and 1,000 units of Product Y will be as under: (A)

	Rs.
Direct Material	30,000
Direct Labour	8,000
Production Overhead	40,000
	78,000

Calculate Product-wise cost under Traditional costing as well as under Activity Based Costing.

12. What are the reasons for material price variance? (U)
13. M/s Moon Light Co. Ltd. fixes the interdivisional transfer prices for its products on the basis of cost plus an estimated return on investment in its division. The relevant particulars of the budget for the Division 'X' for the year 2019-20 is given below: (A)

Particulars	Amount
Fixed assets	6,00,000
Current assets (other than cash at bank)	3,00,000
Cash at bank	1,00,000
Yearly fixed cost for the division	9,00,000
Variable cost per unit	10
Budgeted volume of production per year (in units)	5,00,000
Desired return on investment	30%

You are required to determine the transfer price for Division 'X'.

14. Enumerate and briefly explain any three methods of determining transfer prices. (U)

15. From the data given below calculate all material variances:
- | Raw Material | STANDARD | ACTUAL | |
|--------------|------------------------|------------------------|-----|
| A | 40 units @ Rs.50 /unit | 50 units @ Rs.50/unit | (A) |
| B | 60 units @Rs.40/unit | 60 units @ Rs.40/units | |
16. Indian Plastics make plastic buckets. An analysis of their accounting reveals variable cost per bucket – Rs.20/-
 Fixed cost – Rs.50,000 for the year
 Capacity – 2,000 buckets per year
 Selling Price per bucket – Rs.70. Find: (A)
- a) BEP
 b) No. of units to be sold to get a profit of Rs.30,000
 c) If company can manufacture 600 buckets more per year with an additional FC of Rs.2,000. What should be the Selling Price to maintain the profit per bucket as at (b) above.
17. Explain the managerial applications of marginal costing. (An)
18. Explain the essential features of product life cycle costing. (E)

(2 x 6 = 12)

PART C

Answer any 2 questions

Weights: 5

19. Division Z is a profit centre, which produces four products – A, B, C and D. Each product is sold in the external market also. Data for the period is as follows:

	A	B	C	D
Market price p.u (Rs)	150	146	140	130
Variable cost of production p.u (Rs)	130	100	90	85
Labour hours required p.u	3	4	2	3

Product D can be transferred to division Y, but the maximum quantity that might be required for transfer is 2,500 units of D. The maximum sales (units) in the external market are:

A – 2,800 units, B – 2,500 units, C – 2,300 units and D – 1,600 units

Division Y can purchase the same product at a slightly cheaper price of Rs 125 per unit instead of receiving transfers of product D from Division Z.

What should be transfer price for each unit for 2,500 units of D, if the total labour hours available in division Z are :

i) 20,000 hours? ii) 30,000 hours?

20. A company running an orchard with an adequate supply of labour presents the following data and requests your advice about the area to be allotted for the cultivation of various types of fruits which would result in the maximization of profits. The company contemplates growing Apples Lemons Oranges and Peaches

	Apples	Lemons	Oranges	Peaches
Selling price per box	15	15	30	45
Season's yield in boxes per acre	500	150	100	200
Cost (Rs.) Material per acre	270	105	90	150
Labour:				
Growing per acre	300	225	150	195
Picking and Packing per box	1.50	1.50	3	4.50
Transport per box	3	3	1.50	4.50

21. RR& Co. Ltd. manufacture a simple product the standard mix of which is:
 Material x 60% at Rs. 20 per kg
 Material y 40% at Rs. 10 per kg
 Normal loss in production is 20% of input. Due to shortage of material X, the standard mix was changed. Actual results for March 2003 were : (A)
- Materials X 105 Kg at Rs 20 per Kg
 Materials Y 95 Kg at Rs 9 per Kg

Input 200 Kg
 Loss 35 Kg
 Output 165 Kg
 Calculate:

- (1) Material price variance
- (2) Material usage variance
- (3) Material mix variance and
- (4) Material yield variance

22. ABC Ltd. manufactures two types of machinery equipments Y and Z and applies/absorbs overheads on the basis of direct labour hours. The budgeted overheads and direct labour hours for the month of December, 2015 are Rs. 12,42,500 and 20,000 hours respectively. The information about company's products is as follows:

	Equipment Y	Equipment Z
Budgeted Production Volume	2,500 units	3,125 units
Direct Material Costs	Rs. 300 per unit	Rs. 450 per unit
Direct Labour Costs:		
Y: 3 hours @ Rs. 150 per hour	Rs.450	
X: 4 hours @ Rs. 150 per hour		Rs. 600

ABC Ltd.'s overheads of Rs.12,42,500 can be identified with three major activities: Order processing (Rs. 2,10,000), Machine processing (Rs, 8,75,000) and product inspection (Rs: 1,57,500). These activities are driven by number of orders processed, machine hours worked and inspection hours respectively. The data relevant to these activities is as follows:

	Orders Processed	Machine hours worked	Inspection hours
Y	350	23,000	4,000
Z	250	27,000	11,000
Total	600	50,000	15,000

Required:

- a) Assuming use of direct labour hours to absorb/apply overheads to production, compute the unit manufacturing cost of equipment's Y and Z, if the budgeted manufacturing volume is attained.
- b) Assuming use of activity based costing, compute the unit manufacturing cost of equipment's Y and Z, if the budgeted manufacturing volume is attained.
- c) ABC Ltd.'s selling prices are based heavily on cost. By using direct labour hours as an application base, calculate the amount of cost distortion (under-costed or over-costed) for each equipment.
- d) Discuss how an activity-based costing might benefit ABC Ltd.

(5 x 2 = 10)

OBE: Questions to Course Outcome Mapping

CO	Course Outcome Description	CL	Questions	Total Wt.
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Cognitive Level (CL): Cr - CREATE; E - EVALUATE; An - ANALYZE; A - APPLY; U - UNDERSTAND; R - REMEMBER;